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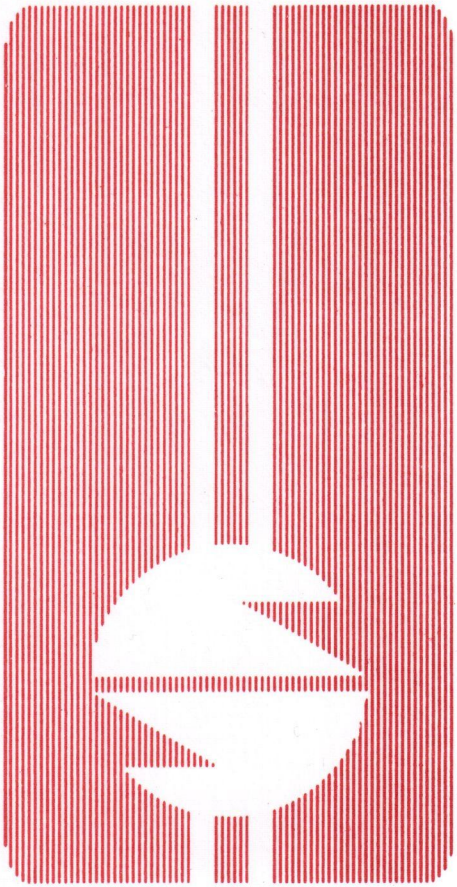

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ARE A BANKING CRISIS A FREE-MARKET PHENOMENON?

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ABSTRACT

In this paper, the author argues that the "conventional theory" on banking crises is not consistent with empirical facts. That theory asserts that fractional reserve banking is crisis-prone, and that modern central banks and their regulations are the best way to avoid such crises. In contrast, the author provides an alternative "legal restrictions" theory that puts the blame for the majority of financial crises on legal restricitons on the market mechanism and on errors of commission and ommission of monetary authorities. In his empirical analysis he argues that most economists rely on the U.S. and U.K. financial historical events, and that, even in these relatively narrow experiences, it is possible to show that the conventional theory does not explain the real causes of the several crises surveyed.

1. INTRODUCTION

Practically everyone believes that the banking crises are an inherent part of fractional reserve banking, which government agencies alone are capable of preventing. Even many persons who otherwise believe in free markets and who are critical of government regulation of banks generally accept the need for some kind of government intervention to prevent or otherwise deal with occasional banking crises.

This paper takes issue with the conventional view of banking crises by arguing that, contrary to popular belief, fractional reserve banking systems are not inherently crisis-prone: if some appear crisis prone it is because government interference or "legal restrictions" in banking have made them that way. Banking crises are, in other words, not a free market phenomenon but are rather a phenomenon made possible by unwise and misguided regulations. The "crisis" argument for government intervention in banking is thus turned on its head.

I plan to elaborate this argument as follows: first I will review the conventional theory of banking crisis, which treats them as inherent to inadequately regulated fractional-reserve banking systems. Then I will confront the theory with international empirical evidence showing how it accounts inadequately for historical banking crises. Finally, I will propose an alternative theory of banking crises - a government

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ANÁLISE ECONÔMICA	ANO 11	Setembro/93	p. 101-115

interference or "legal restrictions" theory - which seems to fit the facts better than the conventional view.

2. THE CONVENTIONAL THEORY OF BANKING CRISIS

The conventional theory of banking crises is so generally accepted that its truth is often simply taken for granted by policy makers, who seldom bother to examine it critically. Nevertheless, a close look at the theory highlights certain empirical implications that turn out to be quite at odds with reality.[1]

The conventional theory starts with a fractional reserve banking system. Otherwise, it could not possibly be a theory of a genuine (as opposed to "pseudo") crisis, involving a potential reduction in the aggregate money stock and consequent threat to the continuous, smooth functioning of the payment system (Schwartz, 1986). A genuine banking crisis erupts when many or all banks in a banking system are a confronted by large-scale demands to redeem their liabilities in cash, which demands the banks are unable to satisfy. In attempting to satisfy the demands, however, the banks must undertake large-scale reductions in their balance sheets, causing a collapse of money and credit. If banks held 100 percent reserves, they could readily redeem all their liabilities at once if they had to without precipitating a crisis. A 100 percent reserve banking crisis is an impossibility.

Some conservative thinkers, including past Chicago-School economists Henry Simons (1948) and Lloyd Mints (1950), view this last fact as reason enough for condemning fractional-reserve banking and for recommending its replacement with some 100 percent-reserve alternative. Such a stance takes for granted, not only the validity of the view that fractional-reserve banking systems are inherently unstable, but also that fractional-reserve banking is not a source of any potential welfare gains to society. Both assumptions are of doubtful validity, the first for reasons to be made clear in the text, and the second because it overlooks the benefits fractional-reserve banking provides by harnessing money holdings as a source of private loanable funds. Under competitive conditions the latter benefits are partly enjoyed by the holders of fractionally-backed bank liabilities themselves, whose gain takes the form of explicit interest payments or lowered bank service charges or a combination of these.[2]

A second feature of the banking system which the theory relies upon, and which is usually taken for granted, is that bank deposit contracts are serviced on a "first-come-first-served" basis: when persons come to redeem their deposits in cash, the bank pays them in the order of their arrival. Those who are first in line therefore face the highest probability of getting their deposits cashed, while those who are last in line face the lowest probability. This assumption is important, because it serves to

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[1] The view being criticized is so much a part of "conventional wisdom" that it is difficult to find explicit expositions of it in the literature. Its main elements may, however, be found in Solow (1982). It should be noted that, in criticizing the conventional view of "banking crises" I am distinguishing such crises from "financial crises" in the broader sense as discussed by Mishkin (1991). According to Schwartz (1986) only a systemwide banking crisis qualifies as a "real or genuine" (as opposed to "pseudo") financial crisis warranting government intervention.

[2] I ignore here the ethical arguments also offered by Rothbard (1991 [1962]) and others against fractional reserve banking.

motivate runs on individual banks, which play a crucial part in the conventional theory of systemwide banking crisis.

Given these basic assumptions, just how does a banking crisis happen? According to the conventional theory, the crisis is triggered by some "shock" to the banking system. This shock may exist only in the minds of some depositors, making the crisis a kind of financial "bubble", or it may be a real event.[3] In either case, the shock must be assumed to pose a threat to at least one bank's liquidity or solvency - the bank's ability to satisfy its customers' demands for cash. The perception that the bank is having difficulties by itself is sufficient to trigger a run on the bank, for reasons that are obvious enough in light of the "first-come-first-served" way in which depositors are serviced.

So much for the conventional view of how a run may develop on a single bank. This is a long way, though, from a story about a banking crisis, which involves simultaneous runs on all or many banks in a banking system. Clearly it is such a crisis, and not runs on one or a small number of banks, that matters - for if only a small number of banks are affected by runs, then persons running on those banks would have no reason to abandon the banking system altogether by hoarding cash. Such persons would instead merely transfer their savings (or so much of it as they have been fortunate enough to recover) to other, unaffected banks in the system. Such limited runs, unlike a true banking crisis, do not end in a collapse of money and credit, and so do not necessarily require any special policy response. They can, of course, spell the doom of particular banks and losses to depositors and borrowers who deal with those banks. It is, however, not all clear why such losses should warrant the government's attention any more than losses associated with routine failures of non-bank firms.[4]

How, then, may individual banks runs and failures be transformed into a true banking crisis? One possibility is an external shock that threatens to undermine the solvency of most or all banks simultaneously. It is difficult, though, to imagine a shock that could have such na effect on a large and heterogeneous banking system. Assuming that the banking system as a whole, if not individual banks within that system, is well diversified, it would seem that only a foreign invasion or civil war or some monetary shock not originating in the private banking system itself could have such a devastating effect. The conventional theory of crises does not, however, portray banking crises as a wartime phenomenon only or as one linked to any particular monetary policies. The theory must, therefore, rely, on some mechanism other than wars and monetary policy shocks to account for "typical" crises.

Instead, the conventional view employs a "contagion effect" hypothesis, which holds that a run on any bank is likely to spread like a contagion or germ or infectious disease to all others banks, eventually undermining confidence in each and every one of them. Why are bank runs contagious? The most popular explanation appeals to what are technically referred to as "information asymmetries" in the market for bank deposits. Although the terminology is forbidding, the reasoning behind it is

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[3] A number of recent studies appear to support the real-shock of "information-based" view of crises over the alternative "bubble" view. See Mishkin (1992) and Calomiris and Gorton (1991).

[4] Goodhart (1988, p. 96-101) argues that government intervention is needed to avoid even limited runs, in order to preserve borrowers' relationship with their banks. For a rebuttal see Schwartz (1988, p. 60n).

straightforward: although each banker knows the contents of his asset portfolio, most depositors do not, and so are inclined to assume that all banks are more or less alike. Because of this, whenever any one bank is seen to be in difficulty, either because it has already failed or because it is being run upon by its customers, these ill-informed depositors immediately begin to worry that their own banks may also be in trouble. Rather than take a chance, and realizing that their recovery of their deposits depends on their redeeming them before others have gotten all the cash, they run on their banks. A crisis thus ensues, with shadow of distrust caste upon all banks and everyone demanding cash at once.

It is important to realize that, according to the conventional view, contagion effects are not extraordinary occurrences but are more likely to be present than not in any banking system unprotected by deposit insurance or a vigilant and dependable central bank. A presumption exists, therefore, that the authorities must guard against each and every bank failure if they are to succeed in avoiding banking crises, or must otherwise insulate the banking system from contagions by offering comprehensive insurance to depositors. Otherwise individual bank runs or failures will occasionally lead to systemwide breakdowns of money and credit.

3. CONFRONTING THE THEORY WITH EVIDENCE

The above, conventional theory of banking crises has guided banking policy in the U. S. and elsewhere for many decades. It has been used to rationalize many kinds of restrictions on banking, ranging for minimum reserve and capital requirements to various interest rate and bank portfolio restrictions. It has also led to the proliferation of government-run deposit insurance schemes, despite the well-known hazards associated with such schemes. Finally, it has helped justify the extension and the consolidation of central bank powers and privileges, encouraging those few nations still lacking their own central banks to view their arrangements as inherently unsafe and economically backwards.

Yet, for all its wide-ranging influence the conventional theory of banking crises fails to pass even the most elementary kind of empirical test. The theory implies that crises are likely in any fractional-reserve banking system and that they are especially likely to occur in systems lacking any public lender of last resort or government deposit insurance. Available historical evidence, however, contradicts both claims. The truth, as revealed in both parts of Table 1, is that genuine banking crises have been rare in most well-studied fractional-reserve banking systems and entirely absent in several. Moreover, many of those systems that had few or no banking crises were also ones that lacked both deposit insurance and a lender of last resort.

There is, in addition, no reason to suspect that these relatively crisis-free banking systems were subject to fewer or less severe shocks than relatively crisis-prone ones. For example, it is apparent that in most respects Canada was just as "shocked" as the United States by the post-1929 collapse of prices and incomes. Yet, while the United States banking system suffered it worst banking crisis ever in connection with the depression. Canada suffered no banking crisis - indeed, no bank failures - at all. Likewise, while the English banking system was battered by numerous shocks throughout the nineteenth century, Scottish banks seemed

immune. Because it can account for cross-country differences in the incidence of crises only by appealing to corresponding differences in the incidence of fundamental shocks (or perceptions of shocks), the conventional theory of crises is hard-pressed to explain the actual incidence of crises in various times and places.

Faced with this evidence of the conventional theory's failure, one cannot help wondering how it managed to become so popular in the first place. Another look at the historical incidence of banking crises suggests and explanation. As the table shows clearly, banking crises appear to have been a U.S. specialty, with Great Britain earning second place in the banking crisis marathon. Most of our economic theories, including the conventional theory of banking crises, come from British and especially American economists, who know much more about the economic experiences of their own countries than they know about experiences elsewhere. It is no wonder, therefore, that the received theory of banking crises appears, superficially at least, to fit the experiences of the U.S. and England, while bearing little connection to the experiences of other nations. Even critics of the received theory, e.g., Kaufman (1993), have played into the hands of it proponents by relying on U.S. experience only to refute conventional assumptions, when the records of other nations would make their task much easier. On the other hand, the few writers who have actually surveyed international experience, including Bordo (1986) and Schwartz (1987; 1988), tend to focus too much on a comparison of the U.S. and "United Kingdom" (meaning England) in drawing general conclusions from their surveys. They are thus led to credit the presence of an "effective" or "dependable" public lender of last resort as the most important reason for the relative infrequency of panics in certain countries during certain periods, ignoring the more numerous cases (including those shown in part b of Table 1) in which panics were avoided despite the absence of a public lender of last resort. These authors thus misleadingly suggest that the presence of a public lender of last resort is a necessary condition for the avoidance of crisis when in fact it is, at best, a sufficient condition only.

Behind our first empirical observation - that banking crises have not been equally frequent everywhere - lies another: that the bank failures typically have not been contagious, or have been only mildly contagious. All banking systems have seen individual banks fail, but such failures have only rarely led to runs on most other banks (Kaufman, 1993). Even in the United States, whose banking system has suffered more bank failures and experienced more crises than any other, wide-ranging bank contagions have been few and far between. This fact is supported both by direct evidence concerning the extent of bank runs and by statistics on the demand of currency, which should, other things being equal, increase whenever panic becomes general. In fact, the U.S. crisis of 1933 alone appears to have involved truly systemwide panic. It is evident that this single episode is what has inspired the conventional view of banking crises. Yet I shall argue later on that even this episode does not lend any real support to conventional views concerning why banking crises occur, and what steps are needed to prevent them.

These observations suggest that the conventional theory of banking crises is seriously incomplete. Yes, banking crises do occasionally occur, and a few have even involved or have threatened to involve a nation's entire banking system. But far from being a typical or likely consequence of isolated bank runs or failures, banking

crises and systemwide banking crises specially appear to be relatively unusual events, and events that are more unusual in some banking systems than in others. Clearly, there is need for some alternative theory of banking crises - one that is more complete than the conventional theory, and therefore more capable of shedding light on why banking crises have occurred in certain times and places but not in others even when the latter also involved the basic ingredients of individual banks failures occurring in a fractional-reserve banking context.

A closer look at the evidence itself suggests the basic outlines of such an alternative theory, for the evidence points to a startling fact: namely, that banking crises have been more frequent in heavily regulated banking systems than in relatively unregulated ones. To show this, Table 1 is divided into two parts, (a) and (b), separating surveyed banking systems into "unfree" and "free" systems, respectively, using criteria taken from a survey by Kurt Schuler (1992). The systems listed in part (a) are ones that, according to Schuler, have throughout their histories been subject to at least two "major" regulatory restrictions; those listed in part (b) were for a time at least characterized by no more than one major restriction. Although they were all "free" for a while all of the part (b) systems were eventually rendered unfree by additional "major" restrictions, usually consisting of restrictions on competitive note issuance anticipating or inaugurating the establishment of central banks.[5] Such restrictions are indicated in the table by black boxes showing dates when the new restrictions were imposed. Similar boxes in part (a) show dates when privileged banks of issue were established in previously "unfree" (but nonetheless decentralized) systems. No box appears in the column for England because the Bank of England already possessed unique note issue privileges there before 1793 - the first crisis date recorded on the table.

This grouping of banking systems reveals clearly the positive connection between the extent of legal restrictions on various banking systems on one hand and the number of banking crises experienced by those systems on the other. Of 48 recorded crises, all but seven (one of which may not have been a "genuine" crisis at all) occurred in unfree systems. Furthermore, nearly half of the crises took place in systems having privileged banks of issue that might, in principle, have served as lenders of last resort. This suggests that the presence of a public lender of last resort has, after all, been neither necessary nor sufficient to prevent the occurrence of banking crises. Of course, defenders of central banking might still insist that the presence of an "effective" and "dependable" lender of last resort is sufficient for the avoidance of crises. Such a stance appears, however, to require na overly convenient definition of "effectiveness" or "dependability".

That is the big picture. Underlying it are smaller portraits of individual crises connecting them to particular institutional and legal circumstances. The common

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[5] In most cases the major changes that marked transition from free to unfree banking was the immediate establishment of a central bank with a monopoly in note issuance. The exception was Scotland, were in 1845 Peel's Act permanently froze the note issues of all Scottish banks without completely stripping them of their right to issue notes. Because a Scottish bank's note issue allowance was not transferable to other banks upon its closing or merger, Peel's Act was expected to eventually lead to a complete Bank of England monopoly. Yet to this day two Scottish banks - the Bank of Scotland and the Royal Bank of Scotland - continue to have notes outstanding in quantities roughly equal to the maximum amounts established by Peel's Act.

features present in these portraits can be summed-up by observing a simple fact, namely, that it is quite difficult if not impossible to give a coherent account of any single banking crisis anywhere without acknowledging a crucial role for some form of government interference or "legal restriction" in helping to make the crisis come about.

4. A "LEGAL RESTRICTIONS" THEORY OF BANKING CRISES

The alternative theory of crises I wish to offer, based on the last observations, is simply this: that banking crises is not a free-market phenomenon, but are rather consequences of misguided or perhaps mischievous government intervention in banking and currency systems. Many kinds of "legal restrictions" have played a role in historical banking crises, so that it is not possible to treat each crisis as having identical causes: unlike the conventional theory of crises, the legal restrictions theory is a "multicausal" rather than an "unicausal" theory. The conventional theory's unicausal view of crises is, indeed, one of its clear weakness. Unicausal explanations of complex though recurrent economic events may be elegant and neat, but they are also usually oversimplified and wrong. While the conventional theory of banking crises accounts only for a "typical" crisis having no historical counterpart, the legal restrictions theory is really a collection of distinct explanations for particular crises all of which, however, share a common basis in misguided government policies.

Although one cannot construct a "general theory" of a banking crises based on legal restrictions, one can present a catalogue of legal restrictions showing how each may help bring about a banking crisis and illustrated with examples taken from the U.S. and elsewhere. George Benston (1991) and I (1989) have already presented such catalogues, so I will not do more than summarize their contents here. Benston and I both note several ways in which legal restrictions have made past banking crises possible. Restrictions:

(1) have increased individual banks' vulnerability to shocks of various kinds;
(2) have been a source of many major shocks;
(3) have created an environment conductive to "contagion" effects, so that individual bank failures are more likely to lead to systemwide runs; and
(4) have obstructed private market mechanisms for avoiding or averting crises.

Restrictions rendering banks more vulnerable to shocks include regulations artificially limiting banks' ability to diversify their assets and liabilities against relative price shocks. The most important examples of such restrictions are ones artificially limiting the size of private banking firms, either by restricting branching or by limiting access to capital. Direct portfolio restrictions (like those embodied in many bank charters) also limit diversification, exposing banks to unnecessary risks. Restrictions on interest rates like those enforced by Regulation Q expose banks unnecessarily to interest-rate shocks.

Some legal restrictions increase individual bank's exposure to risk by actually subsidizing risky undertakings while allowing banks to reduce their own capital.

Examples of this include government deposit insurance and the presence of a lender of last resort that may be willing to rescue insolvent banks.

Among restrictions that provide a basis for shocks that would otherwise not occur, the most important are restrictions supporting discretionary money supply management by central banks. These restrictions - including legal tender laws supporting fiat money and restrictions on private note issuance - are the fundamental basis for major interest-rate and price-level swings which, according to Schwartz (1988) have been the root cause of both past and recent waves of financial firm insolvencies.

Restrictions have also made contagion effects more likely. As I noted previously, contagion effects have been the exception rather than a rule in economic history. That in itself contradicts the conventional theory of banking crises. But there is more: for where contagions have taken hold in the past, they too have been encouraged by government interference. For example, government-erected barriers to branch banking in the U.S. have sponsored artificial growth of correspondent relationships among banks, making confidence in banks a function of confidence in their correspondents, while interference with private note issuance has obstructed one potential "secondary" market for bank liabilities, which might have otherwise served to efficiently price bank-specific risks, eliminating the basis for information asymmetries. Other forms of interference, including bank holidays and manipulations of the monetary standard have also helped produce contagions of panic, as will be seen below in reviewing the crisis of 1933.

Perhaps the worst way in which governments have helped expose banking systems to crises has been by interfering with banks' own devices for avoiding or otherwise dealing with such crises. By restricting private note issuance governments have made it impossible for private banks to accommodate even routine changes in the demand for currency (Selgin,1988). Governments have also prevented banks from undertaking "restrictions" of payments as a private means for coping with major shocks (Rockoff, 1989). Finally, governments have artificially encouraged reliance on central bank lending in place of private interbank lending: all too often, central banks have functioned, not as lenders of last resort, but as lenders of *first* resort. This makes them appear more essential in rescuing illiquid but solvent banks than they really are. Central bankers are loathe to pass by any opportunity they may have to present themselves as "white knights" coming to the rescue of an illiquid private bank – the damsel in distress. Of course, branching restrictions and other devises that discourage the development of large, private banks also undermine opportunities for private assistance, for the simple reason that it is much more difficult for a clearinghouse or other private bankers' "club" to put together a large emergency loan package involving many small banks than it is to put a similar package together involving fewer, large banks. Restrictions on mergers, finally, serve as a source of avoidable losses which, in the absence of insurance, could fuel panic.

5. THE ROLE OF CURRENCY MONOPOLY

One legal restriction seldom discussed in the literature - the inability of private banks to issue their own notes - was shown above to enhance the likelihood of banking crises in at least three important ways:

(1) first, it prevents banks from relying upon their own resources to accommodate routine changes in the public's demand for currency;

(2) second, it eliminates the "secondary note market" that could otherwise function to eliminate information asymmetries in the market for bank money;

(3) finally, monopolization of the supply of currency has been the basis for central banks' discretionary control of the stock of bank reserves. Through such control, central banks have been able recklessly to expand their own balance sheets, causing otherwise impossible gyration in the price level, interest rates, and exchange rates that have been the worst "shocks" to which private banks have historically been subjected.

That currency monopoly is the basis for central banks' discretionary manipulations of the money stock is, I trust, obvious enough: as long as all banks have equal rights to issue notes, none ever things of holding a rival's notes as reserves. Instead, rival's notes are actively returned for redemption in some basic money. Historically this meant gold.

The awarding of monopoly privileges in note issuance changes all this. Suddenly one banks becomes the system's sole source of convenient paper currency. Other banks begin to covet its notes, which (being at first still redeemable in gold) are in widespread demand. Soon the notes are being treated as a reserve, used in place of gold which, in turn, is placed on deposit with the privileged bank. At this point the privileged bank no longer has to worry about its own issues being redeemed by rivals. Its sole concern becomes the balance of international gold payments, which eventually turns against it if it expands too much, which it is inevitably tempted to do. (Under free banking, in contrast, it is simply not possible to have a balance of payments crisis initiated by excessive domestic money creation.) But there is a way around the balance of payments constraint that limits even monopoly bank expansion under a gold standard: the suspension of international gold payments. What no bank would have dared to do in a system in which all banks enjoyed equal rights is now done with impunity by the privileged bank of issue, thereby making its notes a fiat money, first temporarily, then for good. The establishment of fiat money in turn means unlimited scope for the bank to further abuse its powers in pursuit of narrow political and financial ends. Such was, broadly speaking, the history of the growth of central banks and fiat money throughout much of the world during present century, which has set the stage for price level, interest rate, and exchange rate movements such as were never seen under the gold standard and which have spelled doom to thousands of private banks. The link between central banking and the abandonment of commodity money is particularly worth stressing, because so many past economists (e. g. Edwin Kemmerer) wrongly perceived central banks as devices for securing monetary stability. The truth, which by now should be apparent, is just the opposite: central banking and monetary stability are ultimately incompatible. Free banking grounded in strict contract and bankruptcy laws would

have provided a much stronger bulwark against the flood of paper money.

The simple lesson in this is, to use the language of game theory, that the central banking "game" does not have a positive sum: the unique powers central banks enjoy have not come to them like a gift from the gods, but are powers that would, under free-market circumstances, have been distributed among all private banks. The consequence of regulations concentrating these powers in a single government-favored bank has been to make other banks into weaklings dependent on central banks for their protection. Today, unfortunately few persons appreciate how the rise of central banking has served to weaken private banks.

6. THE BANKING CRISIS OF 1933.

Although it is not possible, within the confines of this paper, to offer a "legal restrictions" theory of every historical banking crisis, or even of the 41 crises listed in Table 1, I will attempt to apply the theory to one important banking crisis, namely, the U.S. crisis of 1933. That crisis is particularly important because, of all crises, it best appears to fit the conventional view. That is not surprising, since the conventional view was to a large extent shaped by the events of 1933.

The basic features of the crisis, consistent with the conventional view, were as follows: large numbers of bank failures in the early 1930s triggered massive withdrawals of currency from the banking system which, in turn, led to the system's failure in March 1933. That failure might have been avoided had the Fed played the part of lender of last resort, either in the traditional manner by making loans to solvent though illiquid banks or by otherwise expanding the monetary base to compensate for changes in the currency-deposit ratio.[6]

Whereas the conventional view blames government for failing to respond appropriately to the crisis, treating the crisis itself as originating in market conditions, the legal restrictions approach identifies a more fundamental role for government interference. To begin, consider the large numbers of bank failures preceding the systemwide "failure" of March 1933. Although bank failures accelerated in the early 1930s, large numbers of bank failures also occurred during the 1920s, when nearly 6000 U.S. banks failed. Most of the failures both then and in the first years of the depression were of small unit banks in agricultural regions, which suffered from a decline in the relative price of agricultural products which predated the Great Depression. Had the U.S. had nationwide branch banking, it might have avoided many or most of these relative-price induced bank failures. Canada, which had branch banking, did avoid bank failures both before and after 1929, except for a single failure in 1923 which involved fraud.

U.S. bank failures increased after 1929 in part because of an increase in the public's desired currency-deposit ratio, which tends to move inversely with changes in real income (Cagan, 1958). Had U.S. banks been free to issue their own notes, as Canadian banks still were able to do at the time, they might have accommodated much of this initial increase in the currency ratio by issuing more of their own notes in exchange for deposits. Indeed, national banks did manage to increase their note

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[6] See Goodfriend and King (1988) on open-market operations as a substitute for discount-window lending.

issues, from $691 million in February 1932 to $922 million in May 1933, thanks to a minor relaxation in otherwise binding note issuance restrictions (Anderson 1979 [1949], p. 289). This increase was, however, only a fraction of what was needed to accommodate the wants of the public. The remaining adjustment had to be provided through increased issues of Federal Reserve Notes or Clearinghouse certificates or, in the absence of either, by means of a depletion of bank reserves.

Table 1 (a) - Banking Panics, 1793-1933: "Unfree" Banking Systems

Year of Panic	United States	England	France	Germany	Italy
1793	x	x	-	-	-
1797	x	x	-	-	-
1810	x	x	-	-	-
1815	x		-	-	-
1819	x		-	-	-
1825	x	x	-	-	-
1833	x		-	-	-
1837	x	x	-	-	-
1839	x		-	-	-
1847	x	x	x	-	-
1848			■	-	-
1857	x	x	x	x	-
1864			x		-
1866		x			-
1873	x			x	-
1875				■	-
1882			x[a]		-
1884					-
1889			x		-
1890					-
1891					x
1893	x				x
1894					■
1901				x	
1907	x				
1913				x	
1914	x ■				x
1921					x
1930	x		x		
1931	x			x	
1933	x				

Sources: Bordo (1984); Schuler (1992); and Schwartz (1988).
Notes: a Large bank failure

Table 1 (b) - Banking Panics, 1793-1933: "Free" Banking Systems

Year of Panic	Canada	Scotland	Sweden	Australia	China	South Africa
1793	-		-	-	-	-
1797	-	x[a]	-	-	-	-
1810	-		-	-	-	-
1815	-		-	-	-	-
1819			-		-	-
1825			-[b]		-	-
1833					-	-[c]
1837	x[d]				-	
1839					-	
1845		■			-	
1847					-	
1857					-	
1864					-	
1866					-	
1873					-	
1882					-	
1884					-	
1889					-	
1890					-	
1891						
1893				x		
1901			■			
1907			x			
1911				■		
1914	x[e]					
1920						x[f] ■
1923	x[g]					
1930						
1931						
1933						

Sources: Bordo (1984); Jonung (1989); Schuler (1992); Schwartz (1988); and White (1984).
Notes: [a] Restriction of payments [b] Swedish free-banking era begins [c] South-African free-banking era begins. [d] Listed as a crisis year by Schuler but not by Schwartz. [e] Minor runs caused by binding capital requirements for note issuance. [f] Inflation follows abandonment of gold standard during World War. [g] Major bank failure accompanied by minor runs on other banks.

Clearinghouse authorities in New York and elsewhere sought the Treasury's permission to issue clearinghouse certificates, as substitutes for bank notes, as they had done during earlier crises, but were refused on the grounds that such a private response was no longer needed: the Fed was capable of issuing "plenty of money that looks like real money" (Burns 1974, p. 75). In the event, of course, the Fed's response proved far from adequate.

Despite large numbers of bank failures and legal restrictions precluding a secondary market in bank notes, bank runs prior to 1933 appear to have been confined to banks that were either pre-run insolvent themselves or, owing to branching restrictions, correspondents of insolvent banks (Wicker 1980). Even the dramatic run against the Bank of the United States in December 1930 was not contagious (ibid., p.580). Widespread panic did not become a feature of the U.S.

banking crisis until February 1933, when it was provoked by two ill-conceived government policies. These policies were the state-declared "bank holidays" commencing with Michigan's on February 14[7] and the Federal government's plan to devalue the dollar, which became a subject of considerable publicity around the same time. As Benston et. al. (1986, p. 52) observe, bank holidays became a potent cause of contagion effects by encouraging currency withdrawals by depositors in nearby states who fear the holidays themselves might spread. Holidays therefore exacerbated the very problem of bank runs they were intended to forestall.[8] Bank holidays were also unnecessary: as bankers urged at the time, mere "restrictions" of payments of high-powered money such as were undertaken during previous panics in 1893 and 1907 could have served the purpose of protecting banks' liquidity without closing the banks and thereby entirely depriving depositors and borrowers of access to funds.[9]

Rumors that gold would be devalued led to a run on the dollar, the burden of which was felt mainly by the Federal Reserve Bank of New York. According to Wigmore (1988) it was the Federal Reserve, rather than commercial banks, that needed and pleaded for a bank holiday, which was finally declared by New York's Governor Lehrman on March 4 and which precipitated the national bank holiday on March 6. Gold was in fact devalued soon afterwards. Although by the time of its accomplishment this devaluation may have appeared necessary as a means for restoring monetary stability, it is important to recognize that devaluation was certainly not necessary earlier in the year, when it was first proposed as a means of supporting prices of farm commodities to placate the farm lobby (ibid., p. 742).

Other Federal policies, including increased postal rates and a two-cent tax on checks, both adopted in mid - 1932, also contributed toward the banking crisis by encouraging public withdrawals of currency from the banking system. These policies as well as those mentioned previously were all instances of government errors of *commission* that contributed toward the banking crisis of 1933. It is such errors of commission rather than the Federal Reserve's equally destructive errors of ommission that warrant treatment of the crisis of 1933 as a product of legal restrictions rather than as a free market phenomenon.

7. A PLEA FOR FURTHER RESEARCH

I have presented here the outlines of a "legal restrictions" theory of banking crises which, I believe, is more consistent with empirical evidence than the conventional theory. In defending this alternative theory, I have, of necessity, had to rely on available cross-country evidence on the incidence of banking crises. In particular, evidence from "free" banking systems is needed to establish a link between freedom in money and banking and the absence of banking crises.

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[7] Nevada set a precedent for these by declaring the first statewide bank holiday of the depression in November, 1932.

[8] For a detailed account of the Holidays' role in the banking panic see Colt and Keith (1933).

[9] See Dwyer and Gilbert (1989). The success of restriction would have depended, in part, on the ability of banks or clearinghoses to issue clearinghouse certificates or "script" as substitutes for Federal Reserve currency and national banks notes. As we have seen, the Federal Government had also refused banks and clearinghouses permission to do this.

Regrettably, the extent of such evidence so far is quite limited: of the six "free" banking systems listed in the table, only three - the Scottish, Canadian, and Swedish systems - have been subjects of recent, reasonably detailed research (Cf. Dowd, 1992). The other free systems listed in the table are known to us mainly through earlier secondary sources; still others listed as free by Schuler could not be included because no detailed records exist concerning their vulnerability to crises. The sample of "unfree" banking systems is likewise small. Ideally, one would wish to have detailed survey evidence from a large sampling of both free and unfree banking systems as a basis for arriving at any valid account of the causes of banking crises. The "legal restrictions" theory proposed here is, therefore, not necessarily the last word on this question. It does, nonetheless, at least attempt to come to grips with the limited evidence already on hand.

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SINOPSE

É A CRISE BANCÁRIA UM FENÔMENO DO LIVRE MERCADO?

Neste artigo, o autor propõe que a "teoria convencional" sobre as crises bancárias não é consistente com os fatos empíricos. Segundo esta teoria, um sistema bancário com reserva fracionária tende, por sua própria lógica, a sofrer crises, e que a melhor forma de evitar estas últimas é através dos bancos centrais modernos e suas regulamentações. Contrariamente, o autor apresenta uma teoria alternativa, baseada em "restrições legais", segundo a qual a maioria das crises financeiras pode ser explicada por impedimentos artificiais aos mecanismos de mercado e por erros de omissão ou atuação das autoridades monetárias. Na sua análise empírica, ele argumenta que os economistas baseiam-se quase que exclusivamente na história financeira dos EUA e do Reino Unido e, que, mesmo nestas experiências históricas relativamente limitadas, é possível demonstrar que a teoria convencional não explica as causas reais das várias crises revistas.